

**DECISION NOTICE/
FINDING OF NO SIGNIFICANT IMPACT (FONSI)**

**Bird Track Springs Fish Habitat Enhancement Project
Environmental Analysis**

USDA Forest Service
Wallowa-Whitman National Forest
La Grande Ranger District
Union County, Oregon

An Environmental Assessment (EA) that discusses the proposed Bird Track Springs (BTS) Fish Enhancement Project within the 6,301-acre planning area on the La Grande Ranger District of the Wallowa-Whitman National Forest and adjacent State and private land is available for review at the La Grande Ranger District Office in La Grande, Oregon.

Approximately 138 acres of the project area are on National Forest System (NFS) lands, the remaining acres are on State (14 acres), and private (6,149 acres) land. The decision described in the Decision Notice is for the activities proposed on NFS lands. Agreements have been signed with the State, a private landowner, and the Confederated Tribes of the Umatilla Indian Reservation (CTUIR) permitting proposed project activities on State and private land within the project area. A separate letter and FONSI will be issued by the Bonneville Power Administration (BPA) to document environmental compliance for all activities within the project area (including those on Jordan Creek Ranch lands. Activities on Bear Creek Ranch as described under the Preferred Alternative Description below will be excluded).

The Decision

Based on the analysis described in the EA and associated project record, it is my decision to implement Alternative 2, as modified below, as the method of treatment and management of these NFS lands. This decision addresses the purpose and need to improve fish and aquatic habitat, address winter ice issues by decreasing erosion and fine sediment sources, improving floodplain function and connectivity, improving instream habitat (increase pool quality and quantity, fish cover, habitat complexity, spawning gravel recruitment), and improvement of riparian vegetation and improved future large wood recruitment potential.

Alternative 2, as modified, responds to issues related to aquatic and fisheries habitat, water quality, protection of cultural resources, and issues raised by commenters during the comment period for this EA. The following describes the preferred alternative.

Preferred Alternative Description:

In response to comments received by an adjacent landowner the following modifications to the BTS project will occur:

Activities proposed on the Bear Creek Ranch parcel of land and on NFS lands adjacent to this parcel will be dropped from consideration in the Bird Track Springs Fish Enhancement. The project now consists of work elements on NFS lands upstream of Jordan Creek Ranch and on Jordan Creek Ranch (see map attached to Appendix E of the EA).

The following actions were proposed in this area in the EA:

- Instream channel work in the mainstem Grande Ronde River was to include increasing the channel depth and narrowing the channel width by placing the materials taken out of the channel bottom and using it to construct a gravel bar along the eastern edge of the channel. Most of this work was proposed on NFS lands, a small portion of this work was proposed on Bear Creek

Ranch parcel focusing around the stream channel in this area. This work will not be completed under this decision.

- Once the gravel bar was constructed and the mainstem channel narrowed and deepened, willow trenches would have been installed scattered across the gravel bar parallel to the mainstem stream channel. Willow trenches consist of a series of trenches approximately 2 feet deep and 4-6 feet long planted with willow branches on the backside of the trench away from the river and backfilled with dirt/cobbles. None of these features will be constructed under this decision.
- Large logs with root wads would have been placed and dug into the newly constructed gravel bar providing protection for the willow trenches. None of these features will be constructed under this decision.
- Two deflector engineered log jams would have been constructed along the newly constructed meander bend of the river. These would have slowed the near-bank velocity of the river, captured drifting wood, and protected the banks from erosion during high flows. These jams were proposed on NFS and Jordan Creek Ranch lands, but have been removed from the project under this decision.
- Live cottonwood flood fences would have been installed behind the gravel bar to slow flood flows, create deposition, and re-vegetate this area. These would have been approximately 20 feet long and scattered around the new gravel bar area and floodplain. These live fences were proposed on NFS, Jordan Creek Ranch, and Bear Creek Ranch lands. None of these features will be installed under this decision.
- Placement of a few boulders and cobbles were proposed in the stream on Bear Creek Ranch to slow stream velocities during high flows and minimize head cutting and erosion. These would not be placed under this decision.

In addition to the removal of the above from the decision, the following work elements will also not occur on adjacent USFS, State, and private land in response to this concern:

- Drop Staging/Storage areas 30, 31, 32, 33, and 47 (1.78 acres)
- Do not construct all or part of Temporary Access Roads 17, 18, 19 (0.33 miles)

The following types of activities will occur on NFS lands within the Bird Track Springs project area under Alternative 2 modified:

- Alter existing channel and construct new stream channel to improve channel geometry and reduce width-to-depth ratios through large wood placement, channel fill, and bar construction.
- Place large wood structures throughout the mainstem channel to provide habitat and channel control.
- Place floodplain wood and plant native shrubs to reduce overland velocities and trap ice.
- Increase channel/floodplain interactions by removing topographical features that inhibit overland flows (historical railroad grade).
- Increase connectivity of existing channel features (swales) and enhance fish cover.
- Re-meander channel in appropriate locations to reconnect to floodplains and existing swale networks while improving channel form and function.
- Improve alcove connectivity to mainstem and enhance fish cover.
- Enhance and protect existing functional juvenile fish-rearing habitats.
- Improve connectivity of spring-fed side channels, wetlands, and alcoves to provide additional summer and winter rearing habitats.
- Plant native vegetation to improve riparian and floodplain conditions and to shade the stream.
- Reduce risk of erosion and ice damage to highway embankments through strategic placement of log structure treatments, rock, and graded features.
- Re-establish interpretive trail and signage with information on restoration activities and natural features of the area.
- Creation of beaver dam analogs.
- Implement an area closure during project activities to provide for public safety within the active construction site.

Channel reconstruction will include both instream work (wood placement and fill) to the existing channel and extensive channel construction activities (refer to the maps in Appendix A for detailed activities and locations). New channel construction will be focused on relocating all or a portion of the river channel to the south floodplain to allow it to re-engage with several historical channel swales and desired pond features. Large wood features (examples pictured below) will be added throughout the project reach. Additionally, selective removal of floodplain fill including portions of the historic Mt. Emily Railroad grade is proposed. Additional excavation to enhance side channels and alcove features at historical channel meander features and depressions throughout the floodplain area will occur as needed to maintain and achieve appropriate grade.

Large wood features will be constructed from locally-sourced logs from private lands. Wood structures are a combination of root wads, cut log boles, and slash material. Large wood structures will be embedded in the bed and banks of the channel and floodplain to provide stability and to resist ice forces. Logs will be trucked or helicopter transported to the project site, stored in pre-established staging areas and then transported to their project locations by off-road dump truck or helicopter depending on site conditions and environmental constraints. Excavators will be used for final large wood placement and construction of large wood structures. Channel features will be re-graded or constructed to alter the existing width and depth consistent with project goals. Constructed channel features will include pools, riffles, and bars made from gravel and cobble sources from local project excavation. Channel features will be constructed to mimic natural river channel development. Floodplain features including side channels and alcoves will be re-shaped and wood strategically placed to improve connectivity with the mainstem of the river and enhance fish cover.

With the exception of logs, some large boulders, additional rock, native seeds, and potted native plants, all materials utilized for the project will be sourced from within the project site and re-purposed in construction of new channel features and floodplain elements. Existing boulder-rock weirs will be removed and boulders re-purposed as habitat features or structural ballast. Abandoned reaches of the existing channel will be filled utilizing excavated material from constructed channel segments. Existing riparian vegetation, topsoil, shrubs, and trees that require removal will be salvaged and re-used in the floodplain. At this time, no native materials are planned for removal from the project site. Non-native materials (trash, noxious weeds, etc.) will be removed if found during construction.

Short-term goals of the proposed action include protecting existing critical rearing and holding habitats within the reach and providing additional and immediate rearing and holding habitats for salmonids. Long-term goals are to re-establish natural processes and restore a dynamic channel that interacts with its floodplain. Floodplain connectivity provides habitat for multiple species, enhances flood control and ice storage benefits and will assist with moderating stream temperatures. Long-term project goals also include providing cooler water within the reach through riparian shading with a mature and densely vegetated riparian floodplain and lessening of daily heating via shallow ground water exchange.

Log Structures

The following approximate amounts of logs and woody material will be used for instream structure construction:

- 930 – 18+ inch trees with root wads
- 240 – 12-18 inch trees with root wads
- 210 – 12-18 inch trees without root wads
- 3,220 – 6-12 inch racking logs
- 780 – 12 inch pinning logs
- 5,910 tons of small trees and branches for racking materials

Each structure site will vary between one to 40 pieces of large woody debris (LWD) with additional wood racking and slash material. Large wood will be approximately 12 to 18 inches or more in diameter and 20 to 40 feet long. These materials will be taken from private lands within the project area (refer to the map in Appendix A for the location of these log source areas) and are addressed in the BPA decision letter and FONSI for this project.

Large wood will be transported to a staging area on NFS land where the trees are sorted into various size categories. From the staging areas within the project area the trees are moved to individual large wood structure sites on NFS land using off-road dump trucks and placed within the stream or habitat structure using a track-mounted excavator. Disturbed sites, access roads, and staging areas will be rehabilitated by planting a native grass seed mix and mulching with weed free materials.

Implementation –

Implementation will be phased over two years based on available funding and permitting requirements including established in-water work periods. Depending upon receipt of all permits, initial construction could begin as early as the spring of 2018 with subsequent work likely occurring for approximately two years thereafter depending upon project design outcomes, stakeholder support, and project funding. Instream work and side channel work will start in the northwest end (near the campground) of the project area and progress in sections downstream. Once restoration work is completed, rehabilitation and planting of disturbed areas will be completed.

Implementation of the activities in this project will require approximately 3.52 miles of temporary access roads within the project area (Table 1) in order to facilitate equipment and material access to the river segments under construction. 2.18 miles will be on Forest Service lands and the remainder (1.34 miles) will be on adjacent State and private lands. Compliance for those roads on adjacent Other Ownership lands are addressed under the BPA decision letter and FONSI. Temporary access roads will be native surface and may have isolated areas of spot rocking if needed. Four temporary river crossings will be constructed where needed for equipment access.

Table 1. Temporary Access Roads.

Temp Rd Number	USFS Miles	Other Ownership Miles
1	0.53	
2	0.13	
3	0.02	
4	0.07	
5	0.31	
6	0.03	
7	0.29	
8	0.21	
9	0.06	
10	0.1	
11	0.02	
12	0.18	
13	0.11	
14		0.39
15		0.2
16		0.34
18	0.07	
19	0.05	0.12
20		0.01
22	<0.01	
Total	2.18	1.34

Approximately 46 staging and storage areas ranging from 0.04 to 12.1 acres in size will be cleared and used to store materials on site for use during construction (refer to EA, Appendix A – Alternative 2 Modified All Activities Map for locations). The majority of these areas are less than one half acre in size and will primarily be used to stage large wood material before it is incorporated into instream structures (Table 2). Nine of these areas are on adjacent State or private lands as show in the table below. These other ownership sites will be addressed under the BPA decision letter and FONSI.

Table 2. Staging and Storage Areas

Storage Area Number	Type	USFS Acres	Other Ownership Miles
1	LWD Staging Area	0.13	
2	LWD Staging Area	0.14	
3	LWD Staging Area	0.08	
4	LWD Staging Area	0.11	
5	LWD Staging Area	0.1	
6	LWD Staging Area	0.04	
7	LWD Staging Area	0.14	
8	LWD Staging Area	0.16	
9	LWD Staging Area	0.13	
10	LWD Staging Area	0.15	
11	LWD Staging Area	0.34	
12	LWD Staging Area	0.22	
13	LWD Staging Area	0.19	
14	LWD Staging Area	0.21	
15	LWD Staging Area	0.11	
16	LWD Staging Area	0.07	
17	LWD Staging Area	0.28	
18	LWD Staging Area	0.14	
19	LWD Staging Area	0.1	
20	LWD Staging Area	0.32	
21	LWD Staging Area	0.56	
22	LWD Staging Area	0.26	
23	LWD Staging Area		0.19
24	LWD Staging Area		0.05
25	LWD Staging Area		0.06
26	LWD Staging Area		0.5
27	LWD Staging Area		0.24
28	LWD Staging Area		0.12
29	LWD Staging Area		0.24
34	Stockpile/Staging Area	1.98	
35	Stockpile/Staging Area	0.24	
36	Stockpile/Staging Area	0.29	
37	Stockpile/Staging Area	0.43	
38	Stockpile/Staging Area	0.26	
39	Stockpile/Staging Area	0.71	
40	Stockpile/Staging Area	0.55	
41	Stockpile/Staging Area	0.87	
42	Stockpile/Staging Area	0.12	
43	Stockpile/Staging Area	0.15	
44	Stockpile/Staging Area	8.31	
45	Stockpile/Staging Area	1.91	
46	Stockpile/Staging Area		0.26
48	Stockpile/Staging Area	2.08	
49	Stockpile/Staging Area	3.24	
50	LWD Staging Area		12.10
Total		25.13	13.76

Approximately 1.9 miles of bypass channels will be constructed by a track mounted excavator to divert river water while instream work is being completed in the main stem of the river. Approximately 25 temporary coffer dams made of native materials (dirt and rock) will be installed to keep the water within the bypass channels. All temporary roads, constructed bypass channels, staging areas and other areas disturbed by equipment will be rehabilitated and re-vegetated with appropriate native potted plants, salvaged vegetation, and seeded with a native grass/forb seed mix after project completion. Mulch will be used in those areas where woody debris is not

available for rehabilitation. All disturbed areas will be rehabilitated in a manner that results in similar or improved conditions relative to pre-project conditions.

As a part of the design of this project approximately 70,632 cubic yards of cut (excavated) material generated during instream enhancement work will be created. Approximately 69,027 cubic yards of this material will be used to fill abandoned channels or alter the existing river channel. Disposal of the remaining 1,600 cubic yards of excess material will be within the project site at locations identified within NFS lands. Excess fill locations will be contoured to simulate natural terrain features. Top-soil will initially be scraped in these areas and then placed on top of fill. Fill locations will be planted and seeded with appropriate native plants and grasses. Approximately 7.39 acres of permanent fill areas (Table 3) have been identified to accommodate this excess material (refer to Appendix A – All Activities Map for locations). 6.82 acres are on USFS lands and the remaining 0.57 acres on other adjacent ownerships and will be addressed in the BPA Decision letter and FONSI.

Table 3. Excess Permanent Fill Areas

Fill Area Number	USFS Acres	Other Ownership Acres
1		0.57
2	0.54	
3	0.4	
4	1.13	
5	4.75	
Total	6.82	0.57

Mitigations and Monitoring:

Mitigation measures incorporated as part of this decision include specific treatment design features as well as a variety of specific resource measures described in the Proposed Action and Alternatives section of the EA on pages 18-37. Wallowa-Whitman National Forest Plan Standards and Guidelines that apply to Management Areas 3 and 15 were also incorporated into project design.

Monitoring of project activities incorporated into this decision is discussed on pages 33 through 35 of the EA.

Alternatives

A range of alternatives to the Proposed Action was considered in this analysis based on public scoping and feedback. The alternatives described below were considered in detail based on the purpose and need of the project and the key issues and public feedback on the Proposed Action as described in the Public Involvement and Tribal Consultation section (EA pages 8-9) of the EA. Forest Service management objectives are incorporated into alternatives by following standards and guidelines of the Wallowa-Whitman National Forest Plan as amended.

Alternative 1 - No Action

This alternative constitutes the "No Action" alternative. Instream enhancement activities, movement of the interpretive trail within the project area, and other management activities identified in the Bird Track Springs analysis area will be deferred. This alternative forms a baseline for comparison of the action alternatives.

Alternative 2 Modified – [Refer to maps in Appendix A of the EA]

This is the preferred alternative as described in the EA and under The Decision above.

Scoping Process

The Forest Service consulted the following individuals, Federal, State, tribal, and local agencies during the development of the Bird Track Springs project:

The Bird Track Springs Fish Habitat Enhancement project was published in the Wallowa-Whitman Schedule of Proposed Actions (SOPA), a quarterly publication, in July 2015 and has appeared in each quarterly SOPA since then. This mailing is distributed to a list of individuals, organizations, and agencies and is published on the Forest's web page at <https://www.fs.usda.gov/project/?project=47283>.

The Bureau of Reclamation initiated consultation with CTUIR in July 2015. The project was also included in the Wallowa-Whitman National Forest 2016 program of work presentation to the CTUIR Board of Trustees on October 19, 2016, and included in the 2017 program of work presentation to CTUIR. Additional coordination was completed in April and May 2018 for the Determination of Effect letter with the CTUIR Cultural Resources Program. Comments received were coordinated with CTUIR and incorporated into the Determination letter. Consultation for the project is ongoing with the CTUIR.

Scoping and consultation with Oregon Department of Fish and Wildlife (ODF&W) was initiated in 2014 and has been ongoing throughout this project.

The USFS and BPA sent a letter inviting comments from interested forest users, affected and adjacent landowners, interested forest users, and concerned publics directing them to a detailed description of the proposed action on Forest Service and BPA websites. This letter was mailed on February 16, 2016 to approximately 100 individuals, groups, agencies, and organizations soliciting comments and concerns related to this project. Five letters and two phone calls were received during this scoping period. Three of the letters expressed interest/support of the project or interest/support in opportunities to participate in the implementation of the project. The other two letters expressed support for the project and requested design features or monitoring be incorporated into project design. One phone call related to opportunities on a parcel of ground outside of this project area and another was from an adjacent landowner ensuring that his property was not included in this project.

An informational meeting with approximately 50 representatives from agencies and organizations involved and/or interested in this project was held on February 23, 2016 to bring stakeholders up to speed on project status and plans.

The Bureau of Reclamation initiated consultation in compliance with section 106 of the National Historic Preservation Act with the Oregon State Historic Preservation Office (SHPO) in July 2015. The Bonneville Power Administration updated the area of potential effects for the project in August 2016. Oregon SHPO agreed with the delineation of the area of potential effects in September 2016. The Effects Determination letter was submitted to SHPO and CTUIR on April 17, 2018. Based on comments received from CTUIR, the letter was updated and re-submitted on May 2, 2018. SHPO concurrence with the effects determination is assumed as no response was received nearly 30 days past the required 30 day response period.

Consultation with National Marine Fisheries Service (NMFS) and US Fish and Wildlife Service (USF&WS) for threatened and endangered species has been completed for this project through the BPA Habitat Improvement Program (HIP III) programmatic agreement.

An analysis file for this project is available for public review at the La Grande Ranger District. The analysis file includes specialists' reports, data specific to the project, public notifications and their responses, meeting notes, and miscellaneous documentation.

Reasons for Decision

I have chosen to implement Alternative 2 modified because it provides a balanced response to the issues and concerns raised in this project while best achieving stated purpose and need objectives aimed at improving

instream aquatic habitat, enhancing riparian habitat, and addressing winter ice issues. This project moves habitat conditions toward the desired future conditions outlined in the amended forest plan. The reasons for this decision follow:

Water Quality

While water quality would experience short-term erosion and sedimentation impacts during construction and channel rewatering, conservation measures implemented during construction activities would limit the magnitude and duration of water quality impacts. Changes in the channel length (increase of 1,100 feet), sinuosity (an increase of 0.13), slope (a 0.05 percent decrease), and floodplain connections would result in slower velocity flows through the reach, increased ponding, and improved shallow and deep groundwater infiltration. The increased frequency of floodplain inundation would result in deposition of additional sediment and soils, increased moisture retention, and increased vegetation establishment.

Stream temperature is expected to decrease incrementally under Alternative 2 modified as a result of increased stream bank stabilization, reduced channel over-widening (width-to-depth ratio), protecting and increasing riparian vegetation and increasing stream shade in the long term. In addition, reconnecting the channel to its floodplain will increase floodplain inundation frequency. As the floodplain absorbs water and saturates, underlying aquifers would recharge helping buffer against stream channel warming. This cold water would then be discharged to the stream during base flow periods when the highest stream temperatures occur. This would have the potential to buffer extremes in water temperature.

Alternative 2 modified will increase floodplain connectivity to the GRR increasing the flooded area affected by 67% (2-year flood) and 60% (10-year flood). Increased inundation from the 2-year peak flows will enhance groundwater recharge, sustain riparian vegetation, increase net deposition of fine sediment, and provide for dissipation of ice jams. Overall, floodplain function and quality would increase, especially once floodplain vegetation becomes established.

Alternative 2 modified will replace wetlands impacted during project activities and create new riverine wetlands along the new channel. Enhanced floodplain connectivity and increase in the frequency and the size of the area flooded, are expected to result in a net increase in quantity of wetlands acreage.

Long term, water quality at a local scale will be improved due to decreased erosion and sediment input into the channel. As the new channel (including channel braids and side channels) captures water at high flows and wood structures force water laterally onto the floodplain, existing stream bank stability is expected to increase. Bank-protection materials such as large wood complexes and eventually mature riparian vegetation will continue to increase streambank stability over the long term.

Long term, enhancing floodplain connectivity, reducing channel width to depth ratios, increasing the frequency and size of the area flooded, and enhancing wetland function will be beneficial to water quality in the area.

Fisheries Habitat

Implementation of Alternative 2 modified will improve fish habitat within the project area restoring the reach to proper functioning condition over the long term.

Improvements to water temperature will directly improve fish habitat. Water temperature buffering reduces salmonid stress particularly in the summer and winter months; fluctuations in water temperature or permanent shifts in water temperature regimes have likely caused this stream reach to be unusable for native fish species, particularly at certain life stages. Restoration of shallow ground water connections with the stream and floodplain will improve habitat and usability for aquatic species in both the channel and streambed.

Incorporating existing cool water sources and improving exchange and capture of water will aid in moderating stream temperatures. In addition, creation of beaver dam analogs will result in increased

deep slow velocity habitat where the water column has vertical temperature stratification providing stable and highly suitable overwintering habitat for juvenile salmonids.

Reintroduction of large wood structure (LWD) to the project reach will improve stream connections with surrounding aquifers, restore complex streambed topography through increasing pool/riffle sequences, encourage gravel bar development and improve subsurface flows. These changes will have moderate to major beneficial effects to fish and aquatic species and habitat.

LWD plays a crucial role in the survival and abundance of juvenile salmon. LWD installed into the banks are expected to increase bank stability and reduce chronic sediment inputs from eroding banks. Rehabilitation of eroding banks will provide long-term benefits to fish and aquatic habitat by reducing fine sediment inputs. Benefits to adult and juvenile salmonids and habitat from the addition of large wood under Alternative 2 modified include increased channel complexity, increased cover for protection, increased pool frequency and quality, improved off-channel habitat, increased frequency of inundation of water on the floodplain and retention of organic materials.

Habitat restoration efforts under Alternative 2 modified also focus on stabilizing overwintering habitats (such as side-channels, alcoves, backwaters, and beaver ponds) which are especially important during meteorological conditions such as rain on snow events and ice dam break up that cause flooding.

Alternative 2 modified will improve instream and riparian habitat for all aquatic species, including those listed as threatened and endangered under the Endangered Species Act. These improvements will contribute to the long term restoration goals for the endangered species and their habitat within this project area.

Cultural Resources and Traditional Cultural Uses

The Confederated Tribes of the Umatilla Indian Reservation (CTUIR) and Nez Perce Tribe expressed concerns over potential impacts to cultural resources and traditional cultural properties. Cultural surveys and associated reports completed for this project were shared with the tribes and included discussions of important traditional cultural uses including key First Foods important to the CTUIR. The decision to implement Alternative 2 modified retains and improves access to the area maintaining opportunities for tribal members to practice traditional uses and implements activities to improve to water quality and fish habitat – resources that are highly valued by the Tribes. Specifically, the improvements to water quality and fish habitat will enhance First Foods opportunities important to the CTUIR and restoration of habitat for endangered steelhead and Chinook salmon important to the Nez Perce Tribe and CTUIR alike.

Other Issues:

Further consideration of the environmental consequences of other issues is disclosed in the EA on pages 83-155 and in the response to public comments in Appendix E of the EA.

Downstream Impacts

Alternative 2 modified is anticipated to generally be beneficial to private lands downstream of the project. The existing river corridor in the project area and downstream is out of balance and currently provides poor fish habitat quality with poor water quality. The river exhibits static, simplified conditions in the upstream portion of the project area and highly dynamic unstable conditions immediately downstream of the proposed project near and within Bear Creek Ranch (BCR). Sediments, trees, and ice that are eroded, fallen, or lifted from the river corridor upstream of the proposed project are transported through the over-widened and armored Grande Ronde River channel in the project area. Currently, the first location where the channel interacts regularly with its floodplain and widens dramatically is downstream of the project near the boundaries of the USFS and BCR. At this location, the channel has been actively accessing a large floodplain area located mostly on the downstream BCR property. This area has been very dynamic in recent years as the channel abruptly transitions from a confined and armored channel to a wide and shallow floodplain area. As would be expected, materials (wood, ice, and sediment) transported in flood by the river often end up in this location.

Monitoring and research of this reach during project planning has revealed that this area (downstream of the proposed project near the NFS/BCR boundary) is undergoing relatively rapid change. Large-scale bank migration has occurred including erosion of approximately 150-feet of the right bank at this meander bend during the floods of 2011. More recently, continued dynamic change has included channel deposition, bar formation, and side channel development. Preferential flow paths have been developing within the NFS/BCR floodplain resulting in perennial side channels of the Grande Ronde River through BCR. Given the angle of attack at this 90-degree meander bend, existing upstream conditions, and the lack of mature woody vegetation within this area, there is a potential for avulsion (rapid abandonment of a river channel and the formation of a new river channel) of the entire Grande Ronde River through one of these preferential flow paths into BCR.

During preliminary design, conservative project elements were proposed to work with current channel processes in hopes of stabilizing the current channel meander bend configuration in this area. Since these project elements have been removed in this decision, this location will continue to evolve with the potential for rapid change that is highly dependent upon future hydrologic conditions regardless of upstream project actions.

The upstream project elements such engineered log jams (ELJs) and bank protection features are designed to provide initial horizontal channel and bank stability along with constructed riffles of specific gradation using local river rock sources to provide vertical channel stability. These elements are very important to project success and monitoring of similar projects within the region have shown that these types of elements are stable up to and within extreme flood events. It is anticipated that some of these ELJ elements will deform and shed individual pieces of wood over time. These potential mobile pieces of wood are typically caught by downstream project elements and remain within the project area; however, individual logs may travel downstream of the project and into BCR in a similar manner as currently occurs. Long-term stability will be provided by healthy riparian vegetation. Riparian vegetation improvement is expected from extensive plantings and natural recruitment through improved floodplain processes. The project has been designed to retain as much existing vegetation (trees, wetlands, and shrubs) as possible, while re-establishing disturbed vegetation through extensive soil-treatment, salvage, and replanting efforts.

Hydraulic modeling indicates that flooding within the BCR property will occur in a manner similar to what occurs now. Project elements such as side channels are designed to provide additional floodplain interaction. The historic railroad grade that currently provides floodplain protection to parts of BCR and Oregon Highway 244 will remain intact within the BCR area and continue to provide protection. Modeling results show nearly identical flood patterns in areas downstream of the proposed project for the 100-year flood event compared to existing conditions. Any future changes to flood patterns within BCR lands are most likely dependent upon physical changes that may or may not occur at the existing river meander bend regardless of upstream project actions, as described previously. The proposed project is likely to slow the existing dynamic processes downstream of the project within the Grande Ronde River reach near the NFS/BCR boundary.

This project would provide a significant change to the upstream 1.9-miles of river corridor with construction of a complex network of river channels that would provide increased upstream floodplain interaction. Modeling results show that this complex system would alter the current conditions and provide numerous opportunities for deposition and capture of sediments, mobile wood, and ice upstream of BCR. It is anticipated that initially, the project area would capture the majority of bedload sediments and large mobile wood entering upstream until an equilibrium is reached which would take several years dependent upon hydrology. It is intended that this would allow for the dynamic meander bend that is upstream and near the NFS/BCR boundary time to stabilize through natural re-vegetation processes.

In review of these consequences, Alternative 2 modified best meets the purpose and need while mitigating impacts to soils, water quality and fisheries, threatened and endangered species, cultural resources, noxious weeds, wildlife, visual resources, recreation, tribal treaty rights, adjacent private lands, and public safety. Alternative 2 modified integrates the purpose and need of the project, meets the legal requirements of National Forest Management Act, responds to downstream landowner concerns, meets forest plan direction, and protects resources within the project area. (EA, pages 37-155)

In summary, my decision to select Alternative 2 modified is based on thoughtful consideration of the public input, ecological conditions of the landscape, predicted environmental effects, and long-term improvement of fish and riparian habitat and water quality for endangered and other aquatic species within the project area.

Findings

The Bird Track Springs Fish Enhancement Project was developed in accordance with the Forest and Rangeland Renewable Resources Planning Act, as amended by the National Forest Management Act (NFMA) and its implementation regulations codified at Title 36, Part 219 of the Code of Federal Regulations. It also was developed in accordance with Council on Environmental Quality Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act (Code of Federal Regulations, Title 40, Part 1508.27). These implementation regulations require specific findings to support decisions subject to the National Environmental Policy Act (NEPA). These findings include (1) Finding of No Significant Impact and (2) Finding of Consistency with Management Direction for the Forest Plan.

Finding of No Significant Impact (FONSI)

As the responsible official, I am responsible for evaluating the effects of the project relative to the definition of significance established by the CEQ Regulations (40 CFR 1508.13). I have reviewed and considered the EA and documentation included in the project record, and I have determined that the proposed action and alternatives will not have a significant effect on the quality of the human environment. As a result, no environmental impact statement will be prepared. My rationale for this finding is as follows, organized by sub-section of the CEQ definition of significance cited above.

Context

For the proposed action and no action alternative, the context of the environmental effects is based on the environmental analysis in the EA.

Intensity

Intensity is a measure of the severity, extent, or quantity of effects, and is based on information from the effects analysis of the EA and the references in the project record. The effects of this project have been appropriately and thoroughly considered with an analysis that is responsive to concerns and issues raised by the public. The agency has taken a hard look at the environmental effects using relevant scientific information and knowledge of site-specific conditions gained from field visits. My finding of no significant impact is based on the context of the project and intensity of effects using the ten factors identified in 40 CFR 1508.27(b).

1. Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial.

Impacts that may be both beneficial and adverse are discussed in the environmental analysis section of the EA. These impacts are within the range of those identified in the Forest Plan. The actions will not have significant impacts on other resources identified and described in this analysis. The effect of the decision is non-significant in the long and short term.

2. The degree to which the proposed action affects public health or safety.

Public health and safety will be minimally affected over a short term by the proposed project. Short-term safety hazards such as truck traffic and heavy equipment on and near roads will be mitigated through contract safety provisions (EA, pp. 23, 153) and an area closure on Forest Service lands within the project area during construction activities. Improved floodplain function and connectivity is anticipated to reduce potential impacts on the adjacent state highway and safety of users through improved capture and storage of ice during ice flow events.

3. Unique characteristics of the geographic area such as the proximity to historical or cultural resources, parklands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.

This project proposal does not affect any unique geographical characteristics such as parklands, prime farmlands, wild and scenic rivers, or ecologically critical areas (EA, p. 153-154). Impacts on cultural resources have been assessed and consulted on with relevant tribes and SHPO.

4. The degree to which the effects on the quality of the human environment are likely to be highly controversial.

Based on the analysis of the effects of implementing this project no substantial scientific evidence exists to dispute the size, nature, or effects of this project on any human environmental factors. Results from public scoping and consultation with tribes have not identified highly controversial concerns or issues associated with this decision (EA, Environmental Impacts section)

5. The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.

There are no known effects on the human environment that are highly uncertain or involve unique or unknown risks associated with this project. Instream enhancement, planting, floodplain enhancement, and channel realignment are common practices and the effects are well known. The EA effectively addresses and analyzes issues and environmental impacts associated with the project (EA, Environmental Impacts section).

These actions pose no disproportionately high or adverse human health or environmental effects, including social and economic effects, on minority or low-income populations. Consistent with the federal government's overall trust responsibility to Indian tribes where treaty or other legally defined rights apply to National Forest System lands, the forest has consulted with tribes on this project. Consultation incorporated multiple opportunities for tribal comments and contributions to the proposed action and Determination of Effects on cultural resources within the project area.

Confederated Tribes of the Umatilla Indian Reservation (CTUIR) was provided copies of the proposed action and heritage reports. The CTUIR specialists and Board of Trustees also received several briefings on this project during formal consultation meetings in 2015 - 2017. Discussions and input received from tribal archaeologists have been incorporated into project design. (EA, pp. 135-145, 153)

6. The degree to which the action may establish precedent for future actions with significant effects or represents a decision in principle about a future consideration.

These actions do not set a precedent for other projects that may be implemented to meet the goals and objectives of the Wallowa-Whitman National Forest Land and Resource Management Plan. The Forest Plan, as amended has set goals of protecting and enhancing riparian and fisheries habitat. This project does not change or amend the forest plan. (EA, pp. 12-37)

7. Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.

There are no known significant adverse, cumulative, or secondary effects between this project and other projects (completed, active, or planned) within or adjacent to the affected area. Effects to the basic resource values of soil, water, vegetation, air, or fish and wildlife were evaluated and determined to be localized and limited (EA, pp. 38-153). This determination is based on the results of cumulative effects analyses discussed in the EA and in Appendix D that considered on-going and proposed activities.

8. The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.

Based on a cultural resource inventory and report, mitigation and protection measures, the known cultural, scientific, or historical resources within the project area have been protected during project

design (EA, pp. 32). Field studies have been completed for cultural and historic resources (Heritage Report and 5-2-2018 BTS Determination Letter SHPO, analysis file). The contract will contain a contract clause requiring protection of any newly detected sites. Consultation with potentially affected tribes and SHPO has been completed.

9. The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act (ESA) of 1973.

A biological evaluation for wildlife proposed, endangered, threatened, and sensitive (PETS) species indicates that this project received a "no impact" determination for the "sensitive" gray wolf, and "may impact individuals or habitat but will not likely contribute to a trend towards federal listing or cause a loss of viability to the population or species for "sensitive" Northern bald eagle, Columbia spotted frog, Lewis' woodpecker, California wolverine, Johnson's hairstreak, and western bumblebee. Canada Lynx received a "no effect" determination. (Wildlife Biological Evaluation, Analysis File)

The biological evaluation for fish species indicates that this project is likely to adversely affect for all three ESA listed fish (Snake River steelhead, Snake River spring/summer Chinook salmon, Columbia River bull trout) and their designated critical habitat due to short term disturbance, sedimentation, and turbidity. The Bird Track Springs Fish Enhancement Project falls within the scope of the National Marine Fisheries Service (NMFS) ESA Section 7 Formal Programmatic Opinion and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Consultation for BPA's Habitat Improvement Program III (HIP III) for Snake River spring/summer Steelhead and Snake River Basin Steelhead and their designated critical habitat. In addition, the BPA has determined that this project also falls within the scope of the US Fish and Wildlife Service ESA Section 7 Formal Programmatic Opinion for BPA's HIP III for Bull Trout and their designated critical habitat. This project was assigned HIP III #2018029. The Project Notification Form for Project #2018029 which acts as proof of coverage for any subsequent regulatory processes was issued on 3/21/2018. No further consultation is required under the ESA.

Implementation of the Bird Track Springs project may impact individuals or habitat for sensitive aquatic species (Redband trout, Pacific lamprey, western ridged mussels, Columbia Pebblesnail, shortfaced lanx, and California floater), but will not likely contribute to a trend towards federal listing or cause a loss of viability to the population or species. (EA pp. 115-122)

The biological evaluation for PETS Plants indicates that project activities may impact individuals or habitat of ten sensitive plant species (7 species of moonwort, mountain grape-fern, Cordilleran sedge, and dwarf phacelia) but will not likely contribute to a trend toward federal listing or cause a loss of viability to the population or species. There will be no impact on three species (Clustered lady's slipper, Bolander's spikerush, and ground cedar) which may have potential habitat within the project area. (EA pp. 113-115)

10. Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment. The actions proposed in this project are all focused on protecting and enhancing the environment by enhancing instream habitat, providing fish passage, and enhancing floodplain connectivity and sustainability (EA, Environmental Impacts pp. 37-155). This decision is consistent with Federal, State and local laws and requirements.

Finding of Consistency with Forest Plan Management Direction

From the results of site-specific analysis documented in the EA, I conclude that this action is consistent with the Wallowa-Whitman National Forest Land and Resource Management Plan, as amended (EA, Environmental Impacts of the Proposed Action and Alternatives section).

Pre-decisional Administrative Project Review

As provided by the Pre-decisional Administrative Review process under 36 CFR 218 Subpart A for Forest Service proposed actions implementing land and resource management plan activities documented with a Record of Decision or Decision Notice, legal notice of the objection process was published in the

Observer newspaper on October 27, 2017. The 45-day objection period ended on December 11, 2017. No objections were received.

As allowed under 36 CFR 218.12(c)(2) when no objection is filed within the objection filing period, the Responsible Official may sign this decision notice on the fifth business day following the end of the objection filing period.

Implementation

This project may be implemented immediately upon signature of this decision notice.

For further information, contact Aric Johnson, Project Specialist, at the La Grande District, 3502 Highway 30, La Grande, Oregon 97850, or telephone (541) 962-8517.



Bill Gamble
District Ranger
La Grande Ranger District



Date

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